

SESSION 3: PRESENTATION OF PAPERS AND DISCUSSION PERIOD

Presentations:-

6. Bolton Central Area Model Verification.
G. Catterson, North West Water Authority.
7. Application of Time Series Rainfall to Bolton Study.
P. Wildbore, WRc Engineering.
8. The Dangers of Force Fitting
G. J. Stickler, WRc Engineering

Discussion:-

R. Ashley

A considerable degree of simplification was undertaken for the Bolton model. Was this done by inspection or a formalised method?

G. Catterson

A procedure similar to that recommended by B. Nussey of Sheffield Polytechnic at the 1986 Spring meetings was adopted. Initial attempts tended to over simplify peripheral areas of the network (eg contributing areas in excess of 10 ha) and some detail had to be reinstated.

D. Balmforth

The paper by Mr. Nussey will be issued shortly as a WAPUG User Note.

D. Dring

Mr. Stickler described the analysis of 3 storms from a 24 hour period. How was the variation in UCWI taken into consideration and were problems experienced with high UCWI values since in his experience a value higher than 170 causes the programs to crash?

G. Stickler

The 3 storms discussed were used to demonstrate an example of gradual monitor failure. Only the first storm was used for verification.

R. Price

The upper limit on UCWI value can easily be changed on main-frame versions of WASSP by changing the relevant "if" statement.

W. Earp, Leicester City Council
Time series rainfall was used to investigate overflow operation in Bolton. How was this checked?

P. Wildbore
Emphasised the importance of using a previously verified model

G. Catterson
All 58 overflows were accurately surveyed and local knowledge concerning their operation supported the results obtained from T.S.R.

M. Mohamed, City of Bristol
Requested guidance on the selection of storms for us in time series rainfall and the return periods to be considered?

P. Wildbore
Current guidance is to use the top 5 ranked storms plus every 5th resulting in savings of 70% in CPU time for 8% loss of accuracy. The series contains 2 storms of approximately 1 in 1 year return frequency with different durations.

D. McGlone
WRc have recently published guidance documents on non-man entry and sewer flow surveys. Is a document planned for sewer cleaning?

B. Wilkinson
These priorities are determined by the Sewerage Rehabilitation Working Group of the Water Authorities Association. Sewer cleansing has a low priority and the next area to be examined will be locational sewer surveys.

B. Wilkinson
The time series rainfall package will have uses other than pollution aspects, including storage requirements and frequency of spill. When will the package be available?

P. Wildbore
The package is currently available in 3 forms. Further information is available from WRc Engineering.

W. F. Gow
Acknowledges the dangers of force fitting measured and predicted hydrographs. However, is force fitting acceptable if a fit is achieved for all storms?

G. Stickler
Any data amendments must be justified but in such a case the model would almost certainly be correct.
